

CLAIM AMENDMENTS

Claim 1 (previously presented):

A woodworking machine comprising:
a cutting tool for cutting workpieces;
a motor configured to drive the cutting tool;
a detection system configured to detect a dangerous condition between a person and the cutting tool;
a reaction system controllable to disable the cutting tool if the dangerous condition is detected; and
a control system configured to determine the operability of the reaction system without having to operate the reaction system and to disable the motor if the reaction system is inoperable.

Claim 2 (previously presented):

The machine of claim 1, where the reaction system includes a capacitor adapted to store electrical charge and to trigger the disabling of the cutting tool upon discharge of at least part of the electrical charge, and where the control system is configured to determine the capacitance of the capacitor.

Claim 3 (previously presented):

The machine of claim 1, where the reaction system includes a capacitor adapted to store electrical charge and to trigger the disabling of the cutting tool upon discharge of at least part of the electrical charge, and where the control system is configured to determine the electrical charge stored on the capacitor.

Claim 4 (withdrawn):

The machine of claim 1, where the reaction system includes a brake mechanism adjacent to and spaced from the cutting tool, and further comprising a spacing detection system adapted to detect whether the spacing between the cutting tool and a selected portion of the brake mechanism is within a predetermined range, and where the control system is configured to disable the motor if the spacing detected by the spacing detection system is out of the predetermined range.

Claim 5 (withdrawn):

The machine of claim 1, where the reaction system includes at least one replaceable single-use component, and where the control system is configured to detect whether the single-use component has been used, and if so, to disable the motor until the single-use component has been replaced.

Claim 6 (withdrawn):

The machine of claim 5, where the reaction system includes a fusible member.

Claim 7 (withdrawn):

The machine of claim 1, further comprising a user interface controllable by the control system to indicate whether the reaction system is operable.

Claim 8 (withdrawn):

The machine of claim 1, further comprising a user-actuable override switch coupled to the control system, and where the control system is configured not to disable the motor if the override switch is actuated.

Claim 9 (withdrawn):

The machine of claim 8, where the control system is configured to at least temporarily disable the reaction system if the override switch is actuated.

Claim 10 (canceled).

Claim 11 (previously presented):

The machine of claim 1, where the reaction system is adapted to be electrically coupled to the control system, and where the control system is configured to disable the motor if the reaction system is not coupled to the control system.

Claims 12-19 (cancelled).

Claim 20 (previously presented):

A woodworking machine comprising:

a cutting tool for cutting workpieces;

a detection system adapted to detect a dangerous condition between a user and the cutting tool;

a reaction system adapted to disable the cutting tool when the detection system detects the dangerous condition; and

a control system adapted to monitor the detection system and control actuation of the reaction system;

where the control system is adapted to test at least a portion of the reaction system to verify that the portion of the reaction system is operational without having to operate the reaction system.

Claim 21 (previously presented):

The machine of claim 20, further including a motor controllable by the control system to drive the cutting tool, and where the control system is adapted to test the portion of the reaction system prior to actuation of the motor, and where the control system is adapted not to actuate the motor unless the portion of the reaction system is operational.

Claim 22 (withdrawn):

The machine of claim 21, where the control system is adapted to test the portion of the reaction system while the motor is running, and to shut off the motor if the control system determines the portion of the reaction system is not operational while the motor is running.

Claim 23-27 (canceled).

Claim 28 (previously presented):

A woodworking machine comprising:

- a support structure;
- a cutting tool adapted to move to cut a workpiece, where the cutting tool is supported by the support structure;
- a motor adapted to drive the cutting tool;
- a detection system adapted to detect a dangerous condition between the cutting tool and a person;
- a reaction system adapted to perform a specified action upon detection of the dangerous condition; and
- a self-test system adapted to test the operability of at least a portion of the reaction system without having to perform the specified action and to disable the motor if the tested portion of the reaction system is inoperable.

Claim 29 (withdrawn):

The woodworking machine of claim 28, where the self-test system tests the operability of the reaction system while the cutting tool is moving.

Claim 30 (previously presented):

A woodworking machine comprising:

a cutting tool for cutting workpieces;

a motor configured to drive the cutting tool;

detection means for detecting a dangerous condition between a person and the cutting tool;

reaction means for disabling the cutting tool if the dangerous condition is detected; and

control means for determining the operability of the reaction means without having to operate the reaction means and for disabling the motor if the reaction means is inoperable.

Claim 31 (previously presented):

The machine of claim 1, where the reaction system includes a fusible member and where the control system is configured to determine the condition of the fusible member.

Claim 32 (new):

The machine of claim 1, where the reaction system is controllable to disable the cutting tool by stopping the cutting tool.

Claim 33 (new):

The machine of claim 1, where the reaction system is controllable to disable the cutting tool by retracting the cutting tool.

Claim 34 (new):

The machine of claim 20, where the reaction system is adapted to disable the cutting tool by stopping the cutting tool.

Claim 35 (new):

The machine of claim 20, where the reaction system is adapted to disable the cutting tool by retracting the cutting tool.